

**An Executive Summary of Key Issues  
Relating to the Painesville Works Site**

**Presented by**

**The Painesville PRP Group**

**April, 1995**

EPA Region 5 Records Ctr.



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## **Introduction and Contact**

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A significant amount of public discussion has occurred regarding certain issues relating to the current status of the Painesville Works Site, located in Painesville, Ohio.

The purpose of this briefing document is to inform interested parties regarding the historical background of the Site, its status, and scientific data that has been compiled during the course of addressing environmental concerns.

This document has been prepared by a group of Potentially Responsible Parties (PRPs, or the "Group") representing a number of past and present owners and/or operators of the Site. The Group seeks to develop reasonable, scientifically-based solutions to certain issues alleged to involve the Site.

The Group continues in its cooperation with all state and federal regulatory agencies involved in seeking answers to these issues based on verifiable scientific data -- the baseline of which is: the site poses no substantial risk to human health or the environment.

The following pages summarize key findings and data from scientific studies that have been conducted. Should you have additional questions regarding the status of the site and the activities currently underway to address environmental concerns, please contact:

**Mr. Joseph H. Phoenix at (216) 350-9901**

**or**

**Mr. William C. Hutton at (214) 953-2870**

## Finding Number One

***The Painesville Works Site is environmentally secure and poses no substantial threat to human health or biota.***

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- ☐ For more than a decade, some members of the Group have made significant, successful efforts in implementing measures that **ensure protection of human health and the environment.**
- ☐ Empirical analysis reveals **the site does not meet the criteria required** for listing on the National Priorities List under the Hazard Ranking System and **poses no substantial threat to human health and biota.**
- ☐ In a 1982 letter, the director of Ohio EPA, opined that ***"responsible companies, such as yours, should not be included on the [National Priorities List]."*** (see Exhibit A)

### **On the One-Acre Landfill:**

- ☐ Monitoring wells installed on the site's perimeter ensure detection of chemicals of concern; to date there have been **no significant findings of migration off-site.**
- ☐ Five extraction wells are collecting water that is shipped off-site to an approved disposal facility.

- ☐ **Concerns over shoreline protection have been effectively addressed** due to the construction of a well-engineered shoreline protection wall; aerial photos indicate no movement of the shoreline behind the wall.
- ☐ **The site's geology contributes to the stability and safety of the area due to heavy clay, bedrock, impermeable salt formations and the absence of drinking water aquifers on or in the vicinity of the Site.**
- ☐ Geological surveys and subsequent analysis have shown that **groundwater is not a viable resource near the site.**
- ☐ In 1983, a member of the Group entered into an Administrative Consent Order to secure and monitor the chrome plant area, and since that time **has complied** with its provisions. **No sample collected during this time has been out of compliance with the ACO.**
- ☐ Meanwhile, **water quality of the Grand River has improved dramatically,** and continues to improve, and is better than drinking water standards.

## Finding Number Two

*Scientific analysis has shown that levels of chemicals of concern detected in adjacent waterways are well below established water quality standards and are lower than levels found in the majority of Ohio waterways.*

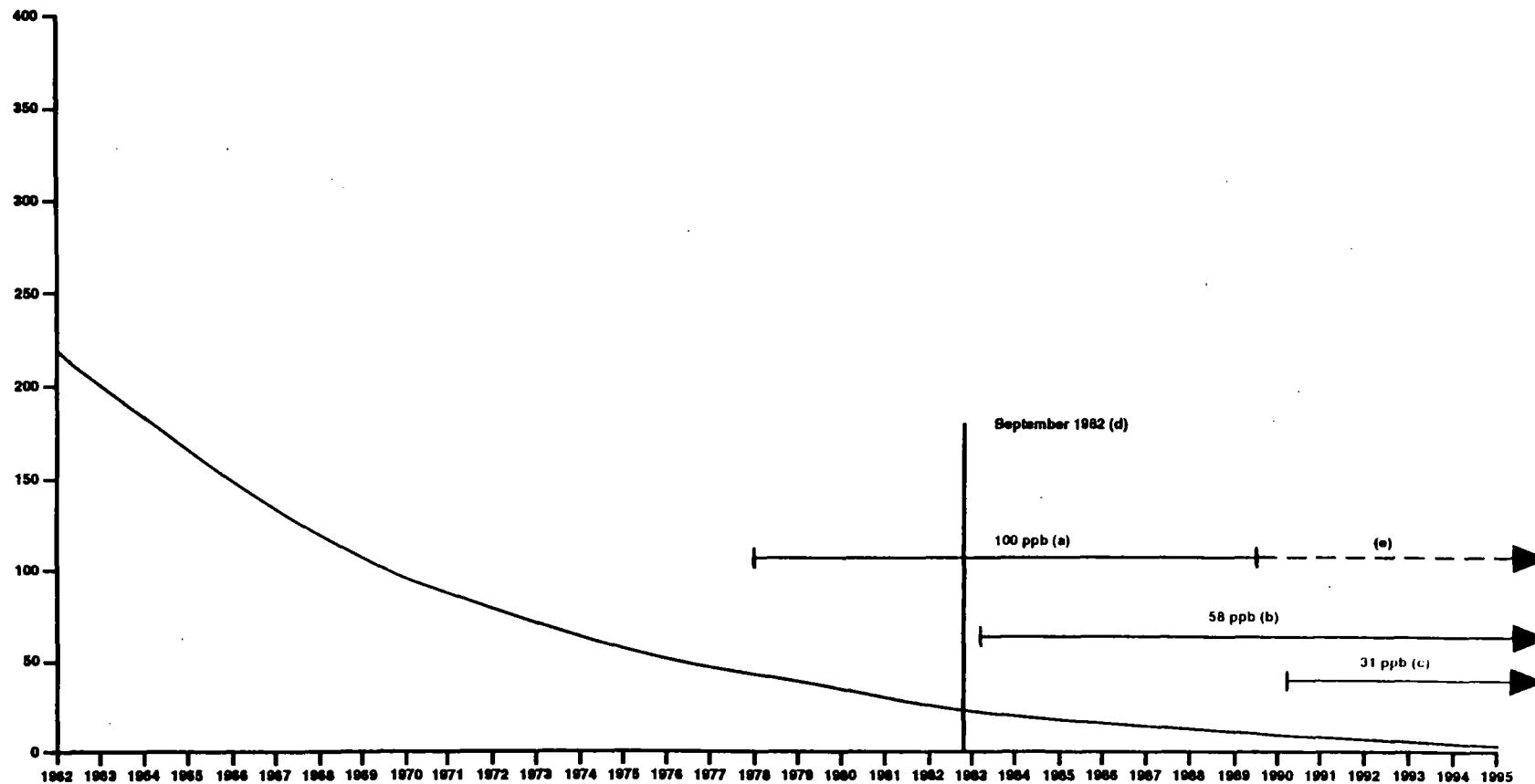
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- ☐ Water quality in the Grand River has been monitored since 1962 and on-site monitoring wells have been monitored since 1983.
- ☐ In recent studies, chromium is the only chemical detected in a portion of fish samples taken that can be associated with the Painesville site, and even then the levels were 3,000 times lower than the current standard considered protective of human health.
- ☐ Previous ecological studies have demonstrated that there are no measurable effects of chromium on biota in the Grand River (1982, 1989) and that fish in the Grand River have the lowest concentrations of chemicals analyzed compared to other rivers in Ohio.
- ☐ Chromium levels in fish in the Grand River are less than the average concentrations found in common foods such as eggs, American cheese, seafood and cereals.
- ☐ Levels of chromium in the Grand River are better than drinking water standards.

- ☐ Trend lines for chromium and dissolved solids concentrations in the river prove that water quality standards are being met and the concentrations of these chemicals continue to decrease. (see attached graphs)
- ☐ Ecological studies indicate no measurable effects of chromium or other chemicals on benthic and fish communities in the Grand River.
- ☐ Data shows that the Grand River has some of the lowest chemical concentrations in fish and sediments of any river in Ohio.
- ☐ The concentrations of all chemicals detected in Grand River fish tissue and sediments are considered to be typical of Ohio rivers and Lake Erie in general.

Concentration (ug/l)

### Trend in Annual Average Hexavalent Chromium Concentration in Grand River Adjacent to Downstream from Site (ug/l)



a) Ohio EPA Water Quality Standard

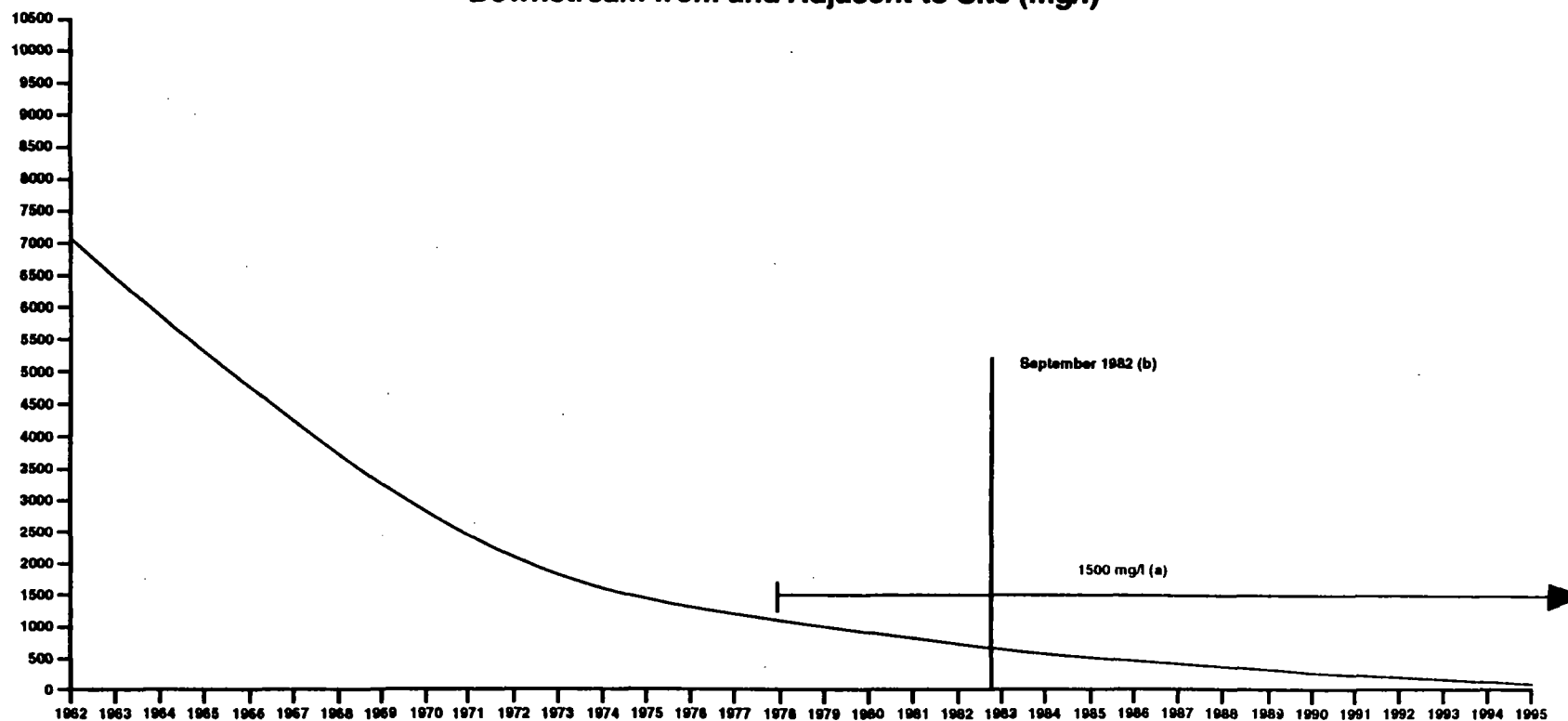
b) Requirement of Consent Order for Chrome Site

c) Ohio EPA Water Quality Standard for soluble hexavalent chromium in the mixing zone

d) September 1982 Recommendation by Director of Ohio EPA that the Painesville site not be listed as a Superfund site

e) Drinking Water Standard

**Trend in Annual Average Total Dissolved Solids Concentration for Grand River  
Downstream from and Adjacent to Site (mg/l)**



a) January 1978 Ohio EPA Water Quality Standard

b) September 1982 Recommendation by Director of Ohio EPA that the Painesville site not be listed as a Superfund site



### Finding Number Three

**Significant progress has been made in addressing on-site environmental concerns. To date, more than \$10 million has been spent to ensure environmental stability of the site and the Group continues in its voluntary cooperation with all regulatory agencies involved to reach a reasonable resolution of these concerns.**

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- ☐ Since the plant's closure in 1976, members of the Group have been diligent in their efforts to develop reasonable, **scientifically-based solutions to ensure protection of human health and the environment.**
- ☐ **Numerous studies, engineering and construction activities have been funded and implemented** in the past decade, efforts which continue today.
- ☐ **In excess of \$10 million has been expended on a voluntary basis to address environmental and regulatory concerns** and to ensure the stability of site.
- ☐ **The Group has never refused to act voluntarily** to address even perceived risks to the environment and/or the community.
- ☐ Most recently, concerns were raised about a little league ballfield near the site. In response, **a risk assessment was conducted and the area was found to be safe.**

- ☐ **The Group continues to cooperate with all regulatory agencies** to address concerns and provide data from its scientific efforts to promote understanding and pursue solutions based on verifiable science.
- ☐ **Such cooperation was noted in explicit terms in 1982 by the director of the Ohio EPA.** (see Exhibit A)
- ☐ As a result of the PRP Group's programs, **environmental quality, based on scientific analysis, has continually improved,** both on land and in adjacent waterways.
- ☐ All levels of **chemical constituents detected in the Grand River are well below state and federal standards** deemed protective of human and ecological health.
- ☐ The historical record of voluntary cooperation, combined with significant progress at the site, makes **inclusion on the National Priorities List, and the commensurate regulatory burden, counterproductive** and could slow the progress of improvements currently underway.
- ☐ **Community and environmental concerns continue to be addressed on a voluntary basis** which more effectively serves the community than what would be experienced under CERCLA.
- ☐ Therefore, **efforts currently underway should be allowed to continue under these voluntary efforts** with state oversight.

#### Finding Number Four

***Prudent evaluation of the site reveals that the Painesville Site proposed for the National Priorities List does not pose any risk commensurate with listing according to the Hazard Ranking System. Further, responsible owners and operators are available to address reasonable concerns about the site. This is not an "orphan" site.***

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- ☐ Such analysis, conducted recently, indicates an HRS score of 1.4, with a score of 28.5 being the standard for listing.
- ☐ In 1982, Mr. Wayne Nichols, then director of Ohio EPA, asked USEPA not to consider the site for NPL listing and indicated he was ***"quite pleased with the cooperation you have demonstrated in resolving the problems that exist at the...site."*** (see Exhibit A)
- ☐ Since that time, water quality and site stability have improved dramatically; consequently, NPL listing is unwarranted and counterproductive.

### Finding Number Five

*The One Acre landfill, which comprises a portion of the site and seems to be the predominate focus of regulatory agencies' concern, meets the current hazardous waste landfill closure standards and monitoring wells continue to confirm no leakage from the site.*

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- ☐ The One Acre landfill portion of the site is a well-engineered facility that meets or exceeds the current standards for closure of hazardous waste landfills.
- ☐ A containment and recovery system has been installed at the One Acre Landfill Site to ensure no off-site threat to human health or biota.
- ☐ The site is further protected by a slurry wall and positive inward pressure by removing waste water from the interior of the site using liquids extraction. No compounds or associated wastes have been detected in monitoring wells outside the perimeter of the slurry wall.
- ☐ Tests indicate it would take 500 years for one molecule of water to move one yard, or to move through the enclosure.

## Conclusions

1. The Painesville Works Site poses no known threat to human health and the environment.
2. The site does not meet the criteria required for listing on the National Priorities List under the Hazard Ranking System and should not be listed. This position was affirmed in 1982 by the director of the Ohio EPA.
3. Subsequently, environmental conditions in areas adjacent to the site, including the Grand River, have continued to improve dramatically. This is confirmed by empirical data derived from on-going monitoring programs since the 1960s.
4. Members of the PRP Group continue to voluntarily cooperate with all regulatory agencies in seeking reasonable, scientifically-based resolutions to perceived on-site environmental concerns.
5. To date, members of the PRP Working Group have expended in excess of \$10 million (over 90 percent went to real corrective measures and not transactional costs) to ensure measures are implemented that are protective of human health and the environment.

6. The Painesville PRP Group should be allowed to continue their voluntary programs outside of CERCLA.
7. The Painesville PRP Group has demonstrated its willingness, and reaffirms its commitment, to address the site.

# OhioEPA

Exhibit "A"

September 16, 1982

Mr. John A. Licata, Manager  
Environmental & Safety Services  
Chemical Unit  
Diamond Shamrock Corporation  
1100 Superior Avenue  
Cleveland, Ohio 44114

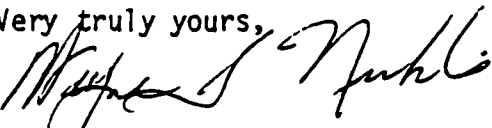
Dear Mr. Licata:

I am writing to inform you of the formal withdrawal of the Diamond Shamrock site in Painesville from the Ohio Unregulated Sites list. We have requested that U.S. EPA not consider this site for the National Priority List. In addition, the Diamond Shamrock site will no longer be part of the OEPA information package distributed on unregulated sites.

It is the OEPA policy that sites owned by viable, responsible companies such as yours, not be included on this list. I am also quite pleased with the cooperation you have demonstrated in resolving the problems that exist at the Painesville site. The Division of Hazardous Materials Management staff has kept me informed of the progress being made.

I hope that we can continue to work together in the future.

Very truly yours,



Wayne S. Nichols  
Director

WSN/maf  
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cc: Chuck Wilhelm, Chief, DHMM  
Rich Shank, Manager, S&ES, DHMM  
Mark Stanga, Legal Advisor  
Al Franks, PIC  
Roger Hannahs, DHMM

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